

Amendments to the Claims:

This listing of claims will replace all prior versions and listings of claims in the application.

Listing of Claims:

1-9. (Canceled).

10. (Currently Amended) A method of determining the location of a touch event within a display area surrounded by a touch frame having a plurality of light emitting elements and a plurality of light receiving elements forming a plurality of triangular zones of light beam paths, each triangular zone being defined by the portion of the display area between (a) a light beam path extending from a light emitting element at one end of a row of light emitting elements to a single light receiving element and (b) a light beam path extending from a light emitting element at the other end of the row of light emitting elements to the single light receiving element, the number and positioning of receivers being sufficient to form partially overlapping zone pairs such that the touch event lies ~~completely~~ entirely within at least two zone pairs, said method comprising:

monitoring each of the zone pairs for blockage of at least one light beam path, wherein monitoring comprises: [[; and]]

comparing the profile of the output to an expected profile having a time-based noise threshold;

identifying a light beam as noise if there is a pulse edge in the profile prior to the noise threshold;

identifying a light beam as connected if there is a pulse edge in the profile after the noise threshold; and

identifying all other light beams as blocked; and

upon such blockage, calculating the location of the touch event associated with the blockage based on the slopes and end points of at least two intersecting blocked light beam paths from a first zone pair and two intersecting blocked light beam paths from a second zone pair.

11. (Original) The method of claim 10 wherein monitoring each of the zone pairs for blockage of at least one light beam path comprises:

randomly activating the light emitting elements, one at a time; and
monitoring the output of each light receiving element associated with the activated light emitting element for an output indicative of a blocked light beam path.

12. (Previously Presented) The method of claim 11 wherein the light emitting elements are activated at pseudo random intervals.

13. (Previously Presented) The method of claim 11 wherein the light emitting elements are activated in a pseudo random sequence.

14-35. (Canceled).

36. (Withdrawn) The method of Claim 10, wherein the touch event is fully located within each of at least four triangular zones having four different associated light receiving elements.

37. (Withdrawn) The method of Claim 10, wherein:
the touch event lies within (a) a first zone pair including a first triangular zone partially overlapping a second triangular zone, and (b) a second zone pair including a third triangular zone partially overlapping a fourth triangular zone;
the first triangular zone does not share any vertex with the second triangular zone; and
the third triangular zone does not share any vertex with the fourth triangular zone.

38. (Withdrawn) The method of Claim 10, wherein a particular triangular zone includes (a) a first light receiving element positioned at a first corner of the touchframe and (b) a row of first light emitting elements, each of the first light emitting elements aimed at a midpoint between (a) the first light receiving element and (b) a second light receiving element positioned at a second corner of the touchframe adjacent the first corner.